OIPE IAP25
SEP 06 2006
PATENT & TRADEMARK OFFICE

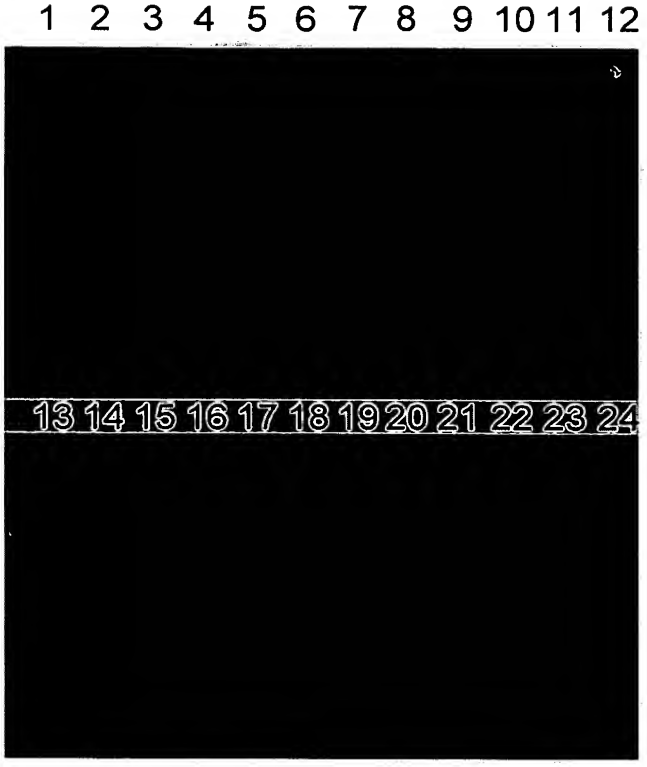

FIG. 2A

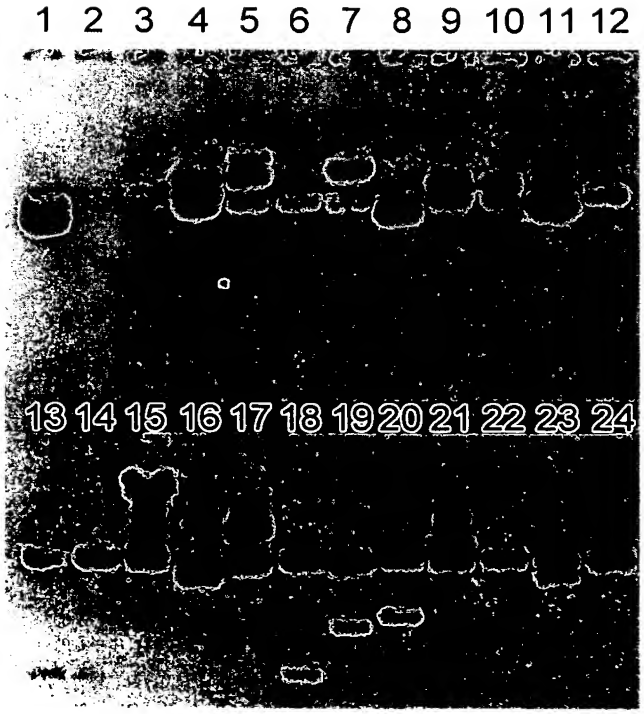

FIG. 2B

BEST AVAILABLE COPY

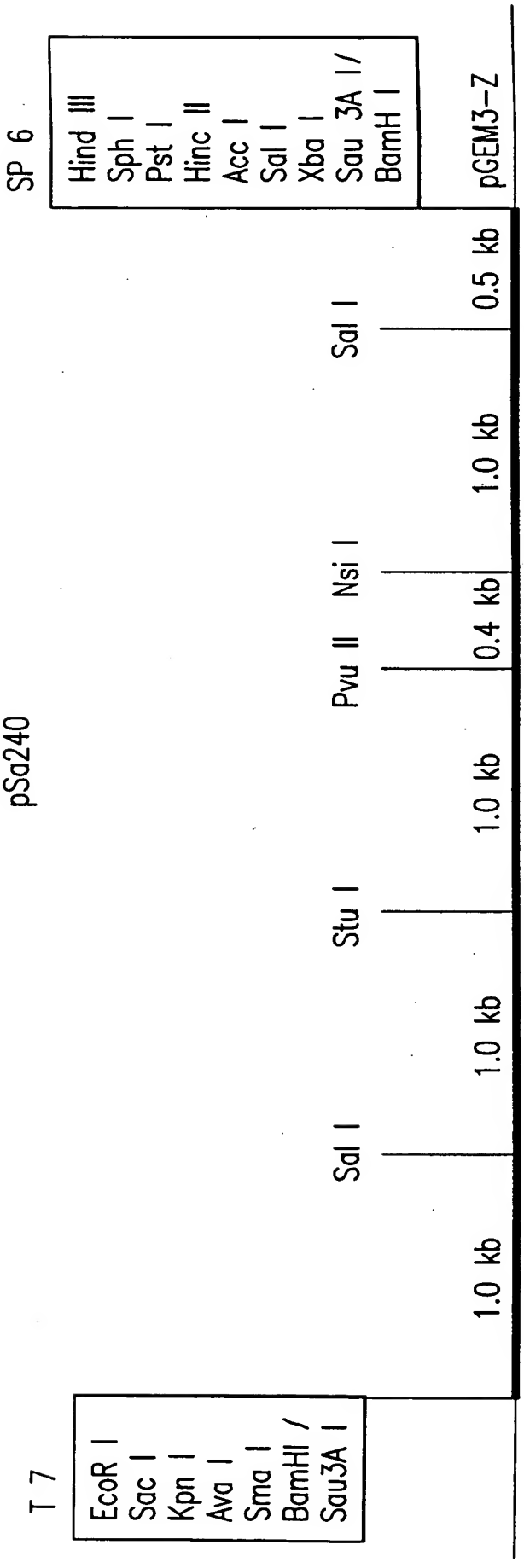
T 7
EcoR I
Sac I
Kpn I
Ava I
Sma I
BamHI / Sau3A I
pSa240
SP 6
Hind III
Sph I
Pst I
Hinc II
Acc I
Sal I
Xba I
Sau 3A I / BamH I
pGEM3-Z
Sal I
Stu I
Pvu II
Nsi I
Sal I
1.0 kb
1.0 kb
1.0 kb
0.4 kb
1.0 kb
0.5 kb

FIG. 7

Sa240 DNA sequence (4,826 bp)

```
gatcggcggc cggtcggcgg tgctggccgc ggtgaccctg ggggcgctgg ccgctccggc     60
ggtgctgctg cgccgggggc tggcggccac cgcggaggcg ctggcggcgc tggccctggt    120
gctgacgctg ctggacgtgt acgcggtcca cgcggtggcc gcgccggaca ccgacggact    180
cggcttcacg gccctcgcgt cggcggtgct cgcggcgctg tggacggcgt acgggctggc    240
gctgggcaag ctgcgcctgc cgttgccggc cgccgtggtg ctggcccagt ggccgctgct    300
gttctgggcc tgggccgtgg gcgcaccggc gccggtggtc gggtgggcgc tgctggccac    360
cgcggtgctg gacggggcga tcgccctgtg gggcaagggc gccggggtgc gggtcacggc    420
gtgcgtcggt ggagcggtga tgggcttctc ggccctgatg gtgggcctgg cgctgtccct    480
gacggccccg gggccgctcg gggcggtggc tccgggcgtg ctgctgctga cggcctcggc    540
ggcggccgtg gccggggcgt ggcgcgcgcc gaagggtttc gcgcggacgg gtggtgcggt    600
ggcggggctc gcggcggtgg cggccgtcgg cggcgtaccg gcggcggcgc tcccggcggg    660
ctggcgggtg ctcgcgtacc tgctgtgcgg tctcgcgttg acggcggtcg tccgttcccg    720
gctgccgggc cacgccgcgc gcggggtact ggcggcgtcg ggggcggtgg tggccggcgc    780
gctggtgtgg gcgctgccgc cgctcgcggc ggtgctgctg gggccggtga cggtgctgtc    840
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gcgtaaccgg aggtggccgt cggtcgtccg gctccggcgc cgttggccgg tccttctggc   1020
tcgacgccgg ccccccggca gcaccggcag cgggagcccc gggcacggat gcgccgggcg   1080
cggccggggg cgctgcgccg tggcccggct ggtccggctg gtccggccgg cccggtgcgg   1140
gggccggtgg tcgcgggcgg ccttccgcgg cgacgctgcg cggggtcgtc ggcgcgggcg   1200
cggtggcgct cggctggggg gccctcctgc tggccggcgc gctgctggac gtgccccacg   1260
cgctcgcgct ggccggggag acggctctgg tgggcgtcct gctcgccctg gcggtccggg   1320
gtggcggcgc cgagcggggc gcgacggcga tgccggtgac cgctctggtg gcttcggtgg   1380
ccggggcggt gagcgccggg ctgctgtcgc tggcgtccga gggggcctcg tacgcggtgt   1440
tcggcgcgct ggcggcgctg ttcgccgggg ccgctctgcg ggcgggcgcc ggggtgccgc   1500
gtgcggtgtt cgcggtcgcc gcggtggtct ggggcaccgt gatcacgggg ttggcgggcc   1560
ggtccctggg gctcgccccg cacgaggccg ccccgctgat gctgctggtg ccggcgctga   1620
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cctcggaggt gtcgttcccg gaggcgtaca cgctgccggt gacggtgccc gcgctgctgg   1920
tcggtgcggc gcggcggcgc cgggacccgg aggcctcgtc gtggacggcg tacgggccgg   1980
ggctcgcggc gacgctgctg cccagcctgg cggtcgcctg gaccgacccg gactggctca   2040
ggccgttgct gctggggacg gcggcgctgg tgatcaccct gctcggcgcg cgccaccggc   2100
tccaggcgct gctgctgctc ggcgggacgg tgctggcact ggtcggcctg cacgagctgg   2160
cgccgtacgt ggtgcaggtc gcgggtgcgc tcccccgctg gctcccgccc gccctggccg   2220
ggctgttgtt gctggtggtc ggagcgacgt acgagcagcg gctgcgggac gcccgccgtc   2280
tgaaggacgc gctggggcgg atgcggtgag ccgtgcccgg tccgggggcg cgcaggtcac   2340
ggcgtccccg ggccgggcgc cagtggcgtg ggcaacgcag agggcccggc cctctgtccg   2400
```

FIG.8A

ggtgggcgat actgggttcg aaccagtgac ctcttcggtg tgaacgaagc gctctcccac 2460
tgagctaatc gcccgggcgc accgcaaaca ttaccccatg tcagcggtgc tcccggaccg 2520
tccccgggct actcgctgat cttccacggc atggtgagcc cgaacttcca gacgtagatc 2580
ccggccagca ccgccatgat cacgagcccg agcgtggtga ggatgatgtt gcgccgccgg 2640
accttgggat cgagggcccg ctgcgccgct tcggtgacct tgcgcttggt ccagcgcagc 2700
accagctggg cccagacgaa ctcggtcgcc cagatcgcca tgccgccgaa gatcaccagc 2760
cagccggggc ccggcagcac cagcatgagc acacccgcga tcaccacgcc gagaccgacg 2820
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gcccgcgagc ccagcgcgcg ttcctcccgg tccgattccc ccgtggcgga taccggggac 2940
gcctgctcgg cgaccttgct ccgctcgtca ctctccgcgt tcatgaagct caacttaccc 3000
gacctgtctc cgtcactgga atgggcgcat aactcaaagt tacacgccgc tgagcggggg 3060
acccgaagcg tcacaaatgg gtcagagggg tttacaacgc caccgtaggt ggcatgtcga 3120
tttcgccgac gtgcgaatcc ccgagcgcac actgagcgaa aggccctggc gcttatgaac 3180
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accggagcgg aggagacggt cgaatgggta ttcgcccgcg acctccttgc cgaggggctg 3360
caccggccca ccggcaccgg agacgtccgc gtctggccat ctcgtagtca cggtcaaggc 3420
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gccgaggtct tcgcggcgcc cgacgcccgc gtcgccgccg acctggtcaa ccggctcgtc 4140
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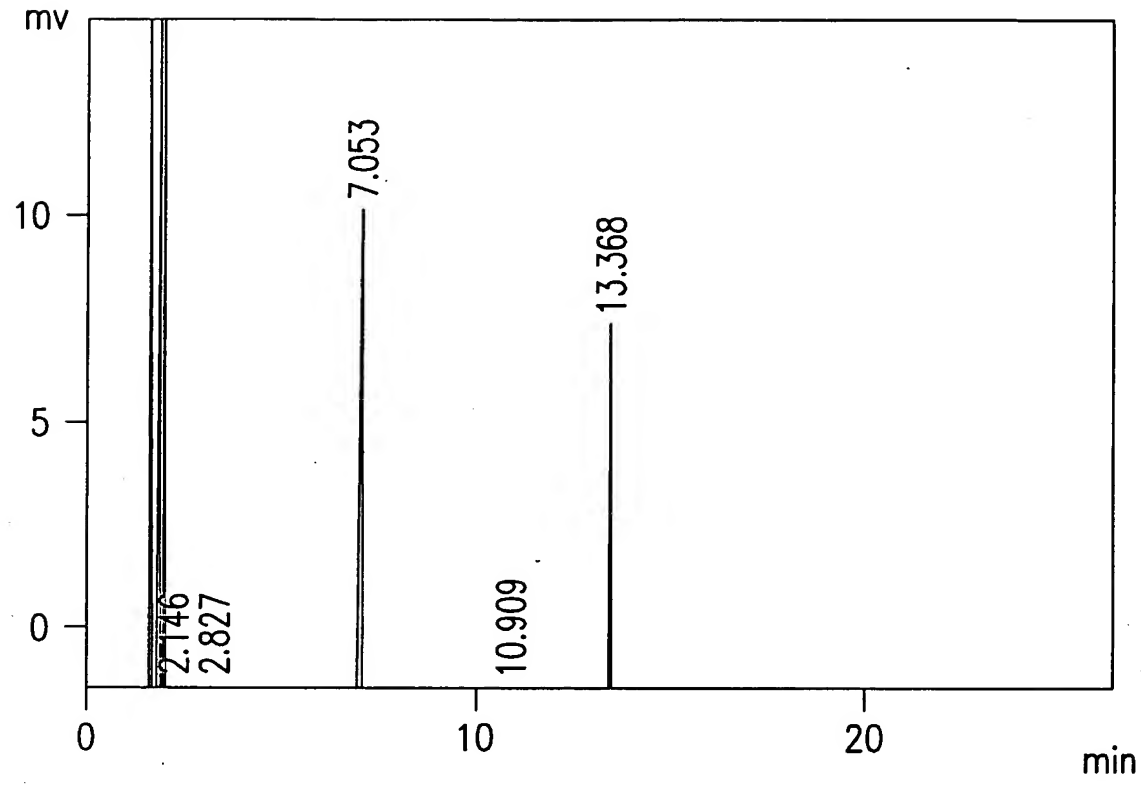
FIG.8B



*** Peak Report ***

KNO	TIME	AREA	HEIGHT	MK	IDNO	CONC	NAME
1	1.742	1090524	630697	V		16.3090	
2	1.803	2759591	1055567	VE		41.2702	
3	1.931	841734	440026	V		12.5883	
4	1.989	1899444	1050304	SVE		28.4066	
5	2.146	1222	1166	T		0.0183	
6	2.827	1691	1181	V		0.0253	
7	7.053	56479	14295			0.8447	
8	10.909	1014	280			0.0152	
9	13.388	34942	11651			0.5226	
		6686640	3205166			100.0000	

FIG.10

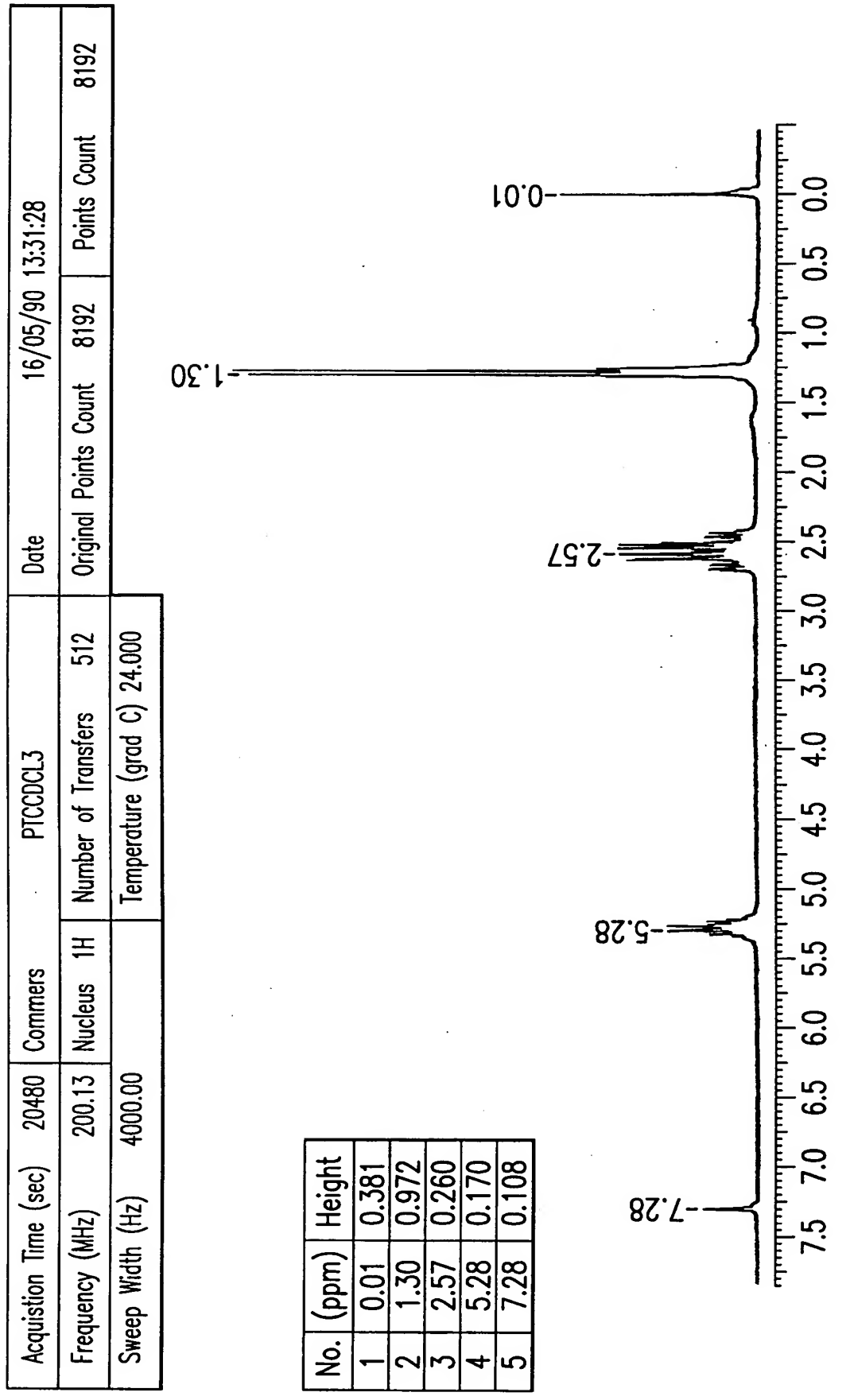

16 May 2000
Acquistion Time (sec) 20480
Commers
PTCCDCL3
Date 16/05/90 13:31:28
Frequency (MHz) 200.13
Nucleus 1H
Number of Transfers 512
Original Points Count 8192
Points Count 8192
Sweep Width (Hz) 4000.00
Temperature (grad C) 24.000
No. (ppm) Height
1 0.01 0.381
2 1.30 0.972
3 2.57 0.260
4 5.28 0.170
5 7.28 0.108
0.01
1.30
2.57
5.28
7.28
7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0

FIG.11